

Chapter One Map 4c  
Measurement Task p. 68 and 69

Notre Dame is looking at a possible temporary addition to house new students for the upcoming year. Currently ND has 510 students. Next years population will increase 20%.

Portable Classrooms need to be built to accomodate the new students. Measurements and pricing structure for the new portables are given on p68 and 69 of the text.

Create calculations for Surface Area and Volume for the necessary materials.

Use the chart provided to create an organized set of calculations/costs for your project.

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Cost Quote			
Description	Cost per Unit	Quantity	Total Cost
Materials for walls, floor, and roof(studs insulation, drywall, siding), in square feet	\$6.95/ft²		
Gravel (yds³)	\$95.00/yd³		
Paint (two coats), in gal	\$26.00/gal		
Doors	\$110 ea		
Windows	\$90.00 ea		
Subtotal			
Hardware	5% of Materials		
Electrical	10% of Materials		
Labour	\$30/hr		

30ppl/por  
Total Renovation Cost =

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Standard Conversion Factors

To use this chart:  
From X Multiplier = Into  
Into X Reciprocal = From

From	Into	Multiplier	Reciprocal
Inches	Millimeters	25.4	0.0394
Length			
1/8ths of inches	Millimeters	3.175	0.315
1/16ths of inches	Millimeters	1.587	0.63
Inches	Meters	0.0254	39.37
Feet	Meters	0.3048	3.281
Yards	Meters	0.914	1.094
Miles	Kilometers	1.609	0.621
Sea Miles	Meters	1652	0.00059
Miles	Meters	1609.3	0.000621
Area			
Square inches	Square centimeters	6.4516	0.155
Square feet	Square meters	0.0929	10.764
Volume			
Cubic inches	Cubic centimeters	16.387	0.061
Cubic inches	Liters	0.016	62.5
Cubic feet	Cubic meters	0.028	35.315
Cubic yards	Cubic meters	0.765	1.308
Imperial gallons	Liters	4.546	0.22
USA gallons	Liters	3.785	0.264
Imperial gallons	USA gallons	1.205	0.83
Weight			
Grams	Ounces	0.035	28.35

100 sq m  
x 10.764  
1076.4 sq ft

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